

## Appendix E: Science Partnerships

### Science Partnerships for Research into the Resources of the Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area Planning Area

The Black Rock Desert–High Rock Canyon Emigrant Trails National Conservation Area (NCA) planning area offers the scientific community opportunities to participate in a variety of research activities associated with its nationally significant geological, ecological, cultural, historical, and economic features. The Bureau of Land Management has a goal of establishing a framework within which partnerships can be created and developed to further such scientific research designed to expand the scientific base necessary to better understand and manage these resources. The framework would be known as the Partnerships in Science (PS). The major goal of PS would be to encourage and facilitate research partnerships that allow the scientific community, resource managers, resource users, and the general public to pursue the common goal of learning more about what the NCA contains, how it evolved to what it is today, how it functions, and how it can best be understood and managed.

PS would provide a focal point for the objective exchange of information and ideas related to the NCA planning area. Further, PS would open the door to a fuller understanding of the rich and still largely unknown desert and mountain world in the Black Rock-High Rock country. Anyone wishing to pursue serious scientific inquiry that would be enhanced by access to the NCA, and who is supportive of the mission of PS, would be welcome to join the partnership. PS would coordinate selection, designation and protection of field research sites for approved projects. In partnership with funding sources PS could provide sponsored internships and facilities for on-site research projects and host annual conferences for presentation and discussion of research results. It is hoped that a wide range of research projects would develop under the PS umbrella. Examples could include:

- Pleistocene hydrology and relationships to the then-contemporary and subsequent biology of the region.
- Role of soil cryptophytes in stability and productivity of Great Basin desert ecosystems.
- Range vegetation changes since the late 1800s.
- Relationships between livestock grazing and sage-grouse populations.
- Aeolian influences on plant geography of the Black Rock Desert region.
- Human habitation near Pleistocene lakes of the Black Rock Desert region.
- Carrying capacity of playa landscapes for recreation uses and visitors.

#### **Objectives**

1. To encourage and facilitate research partnerships in which the scientific community, resource managers, resource users, and the general public could pursue the common goal of learning more about what the NCA contains, how it got this way, how it functions, and how it can best be understood and managed.

2. To provide both an administrative physical location and commitment to support inquiry into the natural, social and cultural phenomena, which would help to determine the present and future condition and uses of the area's natural resources.

### **Rationale**

Sound management of the NCA planning area depends on the availability and application of accurate and complete information. To make land use decisions managers use information of varying reliability from many sources. The outcome of land use decisions could well depend on the completeness and quality of the supporting information upon which they are based. Good resource information is the key to good resource management. Few resource managers have ever felt that they had too much, or even enough, good information about their region of concern. The Black Rock Desert-High Rock Canyon Emigrant Trails NCA planning area is certainly a place needing much more reliable, relevant resource data for land managers than is currently available.

Encouragement and support of independent research into questions related to the NCA planning area will directly and materially improve the management of its resources and programs. The challenges of managing a complex system of inter-related physical, biological, social, cultural, political, and economic elements is an open-ended, ongoing process of developing reliable information and using that information to make good decisions. The best decisions are based on what has come to be labeled “good science.” PS is dedicated to providing a good home for “good science”.

### **Actions**

1. Develop a working advisory board or committee under the overall direction of BLM's NCA Manager or authorized representative composed primarily of members from the scientific community both within and outside of BLM, but including representation from non-scientific members with interests in the objectives of PS.
2. Communicate actively with the general public to encourage participation and cooperation in scientific projects, inform the public of significant new discoveries, and invite public feedback on objectives and results of PS activities.
3. Coordinate, approve and permit where necessary research activities within the NCA planning area.
4. Sponsor an annual conference for presentation of research results.
5. Facilitate briefings and working sessions to transfer research results to managers.